THAT WHICH IS CLAIMED IS:

1. A microwave monolithic integrated circuit (MMIC) assembly comprising:

a dielectric substrate having a surface on which radio frequency circuits and microstrip lines are formed and at least one MMIC chip opening dimensioned for receiving therethrough a MMIC chip;

a metallic carrier having a mismatched coefficient of thermal expansion to the dielectric substrate, and a component surface which is secured to the dielectric substrate on the surface opposing the radio frequency circuits and microstrip lines, and having at least one raised pedestal on the component surface that is positioned at the MMIC chip opening;

a MMIC chip secured on the pedestal and extending through the MMIC chip opening for connection to the radio frequency circuits and microstrip lines; and

stress relief portions formed in the metallic carrier that segment the carrier into subcarriers and provides stress relief during expansion and contraction created by temperature changes.

2. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said MMIC chip includes a circuit connection surface and said pedestal is dimensioned such that the circuit connection surface of the MMIC chips is positioned coplanar with the radio frequency circuits and microstrip lines on the dielectric substrate.

3. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said stress relief portions are formed as grooves

within the side of the carrier opposite the component side.

4. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said stress relief portions are formed as cuts that extend through the carrier.

5. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said carrier is formed substantially from copper or aluminum.

6. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said carrier has a coefficient of thermal expansion between about 16 and about 17 ppm/deg Centigrade and said MMIC chip and dielectric substrate have a coefficient of thermal expansion of between about 6 about 7 ppm/deg Centigrade.

7. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, and further comprising an adhesive positioned on an area defined by the subcarriers for adhesively securing the substrate to the carrier.

8. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 7, wherein said adhesive comprises a compliant epoxy.

9. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 1, wherein said stress relief portions comprise etched portions in which the metallic carrier has been removed.

10. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 9, wherein said subcarriers are formed by etching the metallic carrier.

11. A microwave monolithic integrated circuit (MMIC) assembly comprising:

a dielectric substrate having a surface on which radio frequency circuits and microstrip lines are formed and at least one MMIC chip opening dimensioned for receiving therethrough a MMIC chip;

a metallic carrier having a mismatched coefficient of thermal expansion to the dielectric substrate, a component surface and a compliant epoxy thereon for adhesively securing the dielectric substrate on the surface opposing the radio frequency circuits and microstrip lines, and having a plurality of raised pedestals on the component surface that are each positioned at a respective MMIC chip opening;

a MMIC chip secured on a pedestal and extending through a respective MMIC chip opening for connection to the radio frequency circuits and microstrip lines; and

stress relief lines etched in the metallic carrier that segment the carrier into rectangular configured subcarriers on which the pedestals are formed and provide stress relief during expansion and contraction created by temperature changes, wherein the compliant epoxy is positioned at an area on the carrier defined by the subcarriers.

12. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 11, wherein said MMIC chip includes a circuit connection surface

and said pedestal is dimensioned such that the circuit connection surface is positioned coplanar with the radio frequency circuits and microstrip lines on the dielectric substrate.

13. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 11, wherein said stress relief lines are formed as etched grooves within a surface of the metallic carrier opposite the component surface.

14. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 11, wherein said stress relief lines are formed as cuts that extend through the carrier.

15. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 11, wherein said carrier is formed substantially from copper or aluminum.

16. A microwave monolithic integrated circuit (MMIC) assembly according to Claim 11, wherein said carrier has a coefficient of thermal expansion between about 16 and about 17 ppm/deg Centigrade and said MMIC chip and dielectric substrate have a coefficient of thermal expansion of between about 6 about 7 ppm/deg Centigrade.

17. A method of interfacing a ceramic substrate, at least one microwave monolithic integrated circuit (MMIC) and metallic carrier having a coefficient of thermal expansion (CTE) that is not matched with the ceramic substrate and the MMIC comprising the steps of:

segmenting the carrier with stress relief portions to form subcarriers; and

bonding the carrier with the ceramic substrate by an adhesive positioned at an area defined by the subcarriers such that the stress relief portions and formed subcarriers provide stress relief during expansion and contraction created by temperature changes.

18. A method according to Claim 17, wherein the step of segmenting the carrier comprises the step of etching the carrier to form the stress relief portions.

19. A method according to Claim 17, and further comprising the step of forming grooves on the carrier for segmenting the carrier into subcarriers.

20. A method according to Claim 17, and further comprising the step of forming cut lines through the carrier for segmenting the carrier into subcarriers.